

**ERRATA SHEET #2 FOR  
ALTERNATIVE FUTURES FOR ROSEMARY POOL**

**April 25, 2014**

PAGE	LOCATION	READS / SHOWS	SHOULD READ / SHOW
Appendix G	Cost Details Alternative Four	Title: Rosemary Pool – Alternative FOUR	The contingency was counted twice in the TOTAL CONSTRUCTION COST. The total \$9,105,353 shall be deleted and the correct estimate of \$7,804,588 shall be inserted which brings the 2013 project cost to \$10,145,964.90. A corrected estimate sheet is attached.
Alternatives Matrix	Alternative 4a Project Estimates	\$11,850,000	\$10,150,000 (2013 dollars)
In response to questions raised by the Community Center of Needham	April 24, 2014 letter (attached)	How much does each parking option cost?	Dollars are in 2013 pricing including general conditions, oh/p, insurance and bonds plus 20% contingency <i>OPTION 1 = Pavement removal and drainage improvements in former parking area \$196,620</i> <i>OPTION 2 = Improve parking and drainage in current location \$883,840</i> <i>OPTION 3 = Expand parking and drainage while maintaining existing vegetated land \$1,380,272</i> <i>OPTION 4 = Terracing the land to maximize parking capacity \$2,341,376</i>

\*NOTE: All costs to be escalated at 5.8% per year to year of construction

Town of Needham  
**Rosemary Pool - Alternative FOUR**  
**Cost Estimate**

Description	Unit	2013 Cost	Quantity	Total (No OH&P)	
<b>DIVISION 2 - SITE WORK</b>					
<b>DEMOLITION</b>					
Existing Pavement Removal	SY	\$10.00	5,000	\$50,000.00	
Drainage Structure Removal	EA	\$400.00	10	\$4,000.00	
Drainage Pipe Removal	LF	\$9.00	500	\$4,500.00	
Selective Building Demolition	AL	\$220,000.00	1	\$220,000.00	
Asbestos Abatement (roof materials potentially)	AL	\$50,000.00	1	\$50,000.00	
<b>Subtotal</b>					<b>\$328,500.00</b>
<b>GENERAL SITE WORK</b>					
Clear and Grub Site	ACRE	\$10,500.00	2	\$21,000.00	
Curb Removed and Stacked	LF	\$5.00	0	\$0.00	
Remove and Reset Existing Drainage Structure Covers	LS	\$2,000.00	8	\$16,000.00	
Dewatering	LS	\$50,000.00	1	\$50,000.00	
Earth Excavation Site	CY	\$10.00	40,000	\$400,000.00	
Earth Excavation Haul & Dispose	CY	\$15.00	20,000	\$300,000.00	
Boulder Excavation & Disposal	CY	\$200.00	150	\$30,000.00	
Tree Removal	ACRE	\$10,000.00	1	\$10,000.00	
Finish Grading	SY	\$1.00	40,000	\$40,000.00	
Loam	CY	\$38.00	1,500	\$57,000.00	
Seed	SY	\$4.00	2,700	\$10,800.00	
Granite Curb	LF	\$45.00	1,800	\$81,000.00	
Gravel Borrow Backfill - Around building for future build out	CY	\$30.00	500	\$15,000.00	
Earthwork & Compaction for future Natatorium	CY	\$75.00	4,500	\$337,500.00	
Gravel Pavement Subbase	CY	\$38.00	1,900	\$72,200.00	
Bituminous Concrete (Hot Mix Asphalt)	TN	\$100.00	750	\$75,000.00	
Drainage System - Underground Leaching Chambers	LF	\$120.00	800	\$96,000.00	
Drainage System - Manhole	EA	\$3,000.00	7	\$21,000.00	
Drainage System - Catchbasin	EA	\$2,300.00	8	\$18,400.00	
Drainage System - Oil/Grit Separator	EA	\$8,000.00	3	\$24,000.00	
Drainage System - 12" RCP	LF	\$40.00	450	\$18,000.00	
Drainage System - 18" RCP	LF	\$70.00	120	\$8,400.00	
Drainage System - 24" RCP	LF	\$75.00	100	\$7,500.00	
Drainage System - 6" Perf. PVC Roof Drain System	LF	\$40.00	300	\$12,000.00	
Detention Pond - Drywell	EA	\$3,000.00	6	\$18,000.00	
Drainage System - Bioretention Basin	LS	\$25,000.00	1	\$25,000.00	
Drainage System - Connect to Existing System	LS	\$5,000.00	1	\$5,000.00	
Drainage System - Relocate Upper Drainage System	LS	\$180,000.00	1	\$180,000.00	
Water Distribution System - Domestic Tap	LS	\$4,000.00	0	\$0.00	
Water Distribution System - Fire Service Tap	LS	\$6,000.00	1	\$6,000.00	
Water Distribution System - 2" Copper	LF	\$35.00	400	\$14,000.00	
Water Distribution System - 8" DI Fire Service	LF	\$50.00	400	\$20,000.00	
Water Distribution System - Hydrant	EA	\$2,500.00	1	\$2,500.00	
Water Distribution System - Valves	EA	\$1,000.00	8	\$8,000.00	
Water Distribution System - Misc. Accessories	LS	\$10,000.00	1	\$10,000.00	
Electrical & Communication System	LF	\$50.00	400	\$20,000.00	
Electrical & Communication System	LS	\$30.00	1,600	\$48,000.00	
Retaining Walls (Parking)	CY	\$600.00	430	\$258,000.00	
Terraced Seating at Pool	CY	\$600.00	250	\$150,000.00	
Landscaping	LS	\$150,000.00	1	\$150,000.00	
Sedimentation Control	LF	\$11.50	4,500	\$51,750.00	
Misc Utility Concrete Pads	CY	\$300.00	10	\$3,000.00	
Main Entry / Signage / Gates / Side Walks	LS	\$7,500.00	1	\$7,500.00	
Timber Guardrail / Edge Treatment	LF	\$35.00	1,200	\$42,000.00	
Site Furnishings	LS	\$56,000.00	1	\$56,000.00	
<b>Subtotal</b>					<b>\$2,795,550.00</b>
<b>FILTER BUILDING + POOL SITE WORK</b>					
Earth Excavation - Bldg Foundations	CY	\$30.00	100	\$3,000.00	
Earth Excavation - Pool Shell	CY	\$30.00	1,200	\$36,000.00	
Earth Excavation Haul & Dispose	CY	\$13.00	600	\$7,800.00	
Excavate for Surge Tank	CY	\$30.00	50	\$1,500.00	
Structural Aggregate Backfill	CY	\$40.00	300	\$12,000.00	
Backfill Building Foundations	CY	\$5.00	90	\$450.00	
Finish Grading	SY	\$1.00	1,200	\$1,200.00	
<b>Subtotal</b>					<b>\$61,950.00</b>
<b>DIVISION 3 - CONCRETE</b>					
<b>CAST-IN-PLACE CONCRETE</b>					
Building Retaining Walls for pedestrian access connections	CY	\$500.00	120	\$60,000.00	
CIP Retaining Walls for terraced parking	CY	\$650.00	280	\$182,000.00	
Slab-on-Grade / Shallow Foundations	SF	\$20.00	500	\$10,000.00	
Pool Concrete Shell	CY	\$600.00	1,500	\$900,000.00	
Filter Building Concrete Slab	CY	\$540.00	10	\$5,400.00	
Misc Concrete Pit & Trenches	CY	\$540.00	25	\$13,500.00	
Precast Concrete Wall Panel System (Wall Type M2)	SF	\$30.00	800	\$24,000.00	
Pool Decking	SF	\$15.00	4,000	\$60,000.00	
<b>Subtotal</b>					<b>\$1,254,900.00</b>
<b>DIVISION 13 - SPECIAL CONSTRUCTION</b>					
<b>POOL SYSTEMS</b>					
Pool Pumps, Filter, & Equip.	LS	1	\$225,000.00	\$ 225,000	
Pool Emergency Shutoff	LS	1	\$15,000.00	\$ 15,000	
I-Beam for pump winch & winch	EA	1	\$5,000.00	\$ 5,000	
24" x 24" main drain assemblies	EA	4	\$2,500.00	\$ 10,000	

Town of Needham  
**Rosemary Pool - Alternative FOUR**  
**Cost Estimate**

Description	Unit	2013 Cost	Quantity	Total (No OH&P)	
14" Sch 80 PVC Pool Drain Piping	LF	500	\$120.00	\$ 60,000	
Hydrostatic valves with sump box	EA	14	\$1,200.00	\$ 16,800	
8" Sch 80 PVC Pool Piping	LF	1,200	\$85.00	\$ 102,000	
UV treatment assembly	EA	1	\$45,000.00	\$ 45,000	
<b>Subtotal</b>					<b>\$478,800.00</b>
<b>DIVISION 15 - MECHANICAL</b>					
<b>FIRE PROTECTION</b> Fire Protection System	SF	\$5.00	2,500	\$12,500.00	
<b>PLUMBING</b> Plumbing System	SF	\$12.00	2,500	\$30,000.00	
<b>HVAC EQUIPMENT</b> HVAC System	SF	\$20.00	2,500	\$50,000.00	
<b>Subtotal</b>					<b>\$92,500.00</b>
<b>DIVISION 16 - ELECTRICAL</b>					
<b>ELECTRICAL</b> Electrical System	SF	\$25.00	2,500	\$62,500.00	
<b>Subtotal</b>					<b>\$62,500.00</b>
<b>DIVISION 3-12 COMPILED</b>					
Building Renovations - moving bathhouse programming to first floor	SF	\$250.00	2,500	\$625,000.00	
<b>Subtotal</b>					<b>\$625,000.00</b>
Pool + Buildings Subtotal:				<b>\$2,513,700</b>	
General Conditions (7.5%):				<b>\$188,528</b>	
Overhead & Profit (5%):				<b>\$135,111</b>	
Insurance & Bonds (2%):				<b>\$56,747</b>	
Subtotal:				<b>\$2,894,086</b>	
Site Work:				<b>\$3,186,000</b>	
Site Work Overhead & Profit (10%):				<b>\$318,600</b>	
Site Work Insurance & Bonds (3%):				<b>\$105,138</b>	
Subtotal:				<b>\$3,609,738</b>	
Building / Site Subtotal:				<b>\$6,503,824</b>	
Contingency (20%):				<b>\$1,300,765</b>	
<b>TOTAL CONSTRUCTION COST:</b>				<b>\$7,804,588</b>	
<b>SOFT COSTS</b>				<b>\$2,341,377</b>	30.00%
A&E Fees (design, bid, const.)					
A&E Special Services					
Owner's Project Manager Fees					
Temporary Facilities					
Printing Cost - Advertisement					
Commissioning					
Abatement					
				<b>\$10,145,964.90</b>	2013
<b>ESCALATION at 5.8% per year</b>				<b>\$10,734,430.86</b>	2014
				<b>\$11,357,027.85</b>	2015
				<b>\$12,015,735.47</b>	2016
				<b>\$12,712,648.12</b>	2017
				<b>\$13,449,981.72</b>	2018
Bubble Design + Construction: \$1.25M including insurance and annual maintenance					
Future Natatorium: 20,000 s.f. @ \$357/s.f. incl soft costs					
Project Costs: \$7,150,000					

# Alternatives Matrix

Amended 4.25.14

## PROJECT ESTIMATES 2013 costs

## Needham Rosemary Pool

### OP/MAINT COSTS

### RECREATIONAL PROGRAM VALUE

### ALTERNATIVE

	PROJECT ESTIMATES 2013 costs	PERMITTING	OP/MAINT COSTS	RECREATIONAL PROGRAM VALUE
<p><b>1</b> 1a: Decommissioning</p> <ul style="list-style-type: none"> <li>▪ Complete removal of the pool</li> <li>▪ Complete removal of the building</li> <li>▪ Complete removal of the lower parking lot</li> <li>▪ Improve site and restore lake bank</li> <li>▪ Improve upper parking lot</li> </ul> <p>1b: Decommission pool / keep the building</p> <ul style="list-style-type: none"> <li>▪ Complete removal of the pool</li> <li>▪ Minor code compliance improvements to building</li> <li>▪ Basic improvements to lower and upper parking lots</li> </ul> <p>1c: Decommission pool / swim in lake / keep the building</p> <ul style="list-style-type: none"> <li>▪ Significant water quality improvement requirements</li> </ul>	<p>\$1,425,000</p> <p>\$1,050,000</p> <p>\$19,000,000</p>	<p>Conservation Commission Notice of Intent</p> <p>DEP Review + Extensive Coordination</p> <p>Army Corps of Engineers Level 2 - Bank Stabilization</p>	<p>\$8,000</p> <p>\$20,000</p> <p>\$120,000</p>	<p>Kayak / canoe launch / trail around lake / model yachting</p> <p>Potential for non-swimming summer camp / recreation opportunities</p>
<p><b>2</b> Minor Renovation</p> <ul style="list-style-type: none"> <li>▪ 11,00 sf pool with limited programming</li> <li>▪ Minor code compliance improvements to building</li> <li>▪ Basic improvements to lower and upper parking lots</li> <li>▪ Baseline improvements to stormwater management, terraces and beach area</li> </ul>	<p>\$5,475,000</p>	<p>Conservation Commission Notice of Intent w/ DEP</p> <p>Army Corps of Engineers Level 2 - Bank Stabilization</p>	<p>\$135,000 = 75% of current costs</p>	<p>Kayak / canoe launch / trail around lake / model yachting</p> <p>Swim team / lessons / public swim / water slide with program- ming overlap</p>
<p><b>3</b> Major Renovation</p> <p>3a: 13,600 sf pool within existing footprint</p> <ul style="list-style-type: none"> <li>▪ Building improvements to maximize existing layout, retain lower level filtration room, include community room and bathhouse functions on top floor and place holder for future indoor pool; lower level will continue to house filtration and storage</li> </ul> <p>3b: 19,700 sf pool within existing footprint</p> <ul style="list-style-type: none"> <li>▪ Building improvements to relocate bathhouse facilities to lower level to accommodate increased fixture count / batherload, upper level to be community space for year round use and place holder for future indoor pool, separate filtration building</li> <li>▪ Expand and improve existing lower parking lot</li> <li>▪ Create ADA compliant pedestrian connection from Rosemary Street</li> <li>▪ Subsurface stormwater mitigation, major beach and terrace area improvement</li> </ul>	<p>\$6,700,000</p> <p>\$8,300,000</p>	<p>Conservation Commission Notice of Intent w/ DEP</p>	<p>\$160,000 (compared to \$180k current costs)</p>	<p>Kayak / canoe launch / trail around lake / model yachting</p> <p>Swim team / lessons / public swim / shallow water / water slide / diving boards with concurrent programming capacity</p>
<p><b>4</b> Full Replacement</p> <ul style="list-style-type: none"> <li>▪ 19,000 sf pool inland from existing location and maximize programming</li> <li>▪ Expand pool deck and restore some bank</li> <li>▪ Building improvements to relocate check-in to lower level, upper level to be community space for year round use and place holder for future indoor pool, separate filtration building</li> <li>▪ Maximize site for parking with retaining walls</li> </ul> <p>4b: Full Replacement with Bubbled Four Season Use</p> <ul style="list-style-type: none"> <li>▪ Expand building to accommodate seasonal bubble structure including year round staffing and operations</li> </ul> <p>4c: Full Replacement with 20k SF Natatorium attached to ex. bldg</p>	<p>\$10,150,000</p> <p>\$13,250,000</p> <p>\$19,750,000</p>	<p>Conservation Commission Notice of Intent w/ DEP</p> <p>Army Corps of Engineers Level 2 - Bank Stabilization</p> <p>PLUS</p> <p>Extensive DEP Coordination / Review + Extensive Mitigation Design</p>	<p>\$160,000</p> <p>\$800,000</p> <p>\$650,000</p>	<p>Kayak / canoe launch / trail around lake / model yachting</p> <p>Swim team / lessons / public swim / shallow water / water slide + diving</p> <p>All season use to include full time operations staff, year round; bubble operations for nine months, h.s. swim team and fee for use programming</p>